

ABSTRACT

The present invention provides a method for reducing a sulfur-containing compound by hydrogenation using a noble metal catalyst. The present invention also provides an industrial method for producing a 2-alkyl-3-aminothiophene derivative with high economical efficiency by hydrogenating a 2-alkenyl-3-aminothiophene derivative using the noble metal catalyst. 2-Alkyl-3-aminothiophene derivatives are useful compounds in the fields of medicine and agriculture, and in particular, useful in bactericides for agriculture or gardening, or intermediates of the bactericides.

For example, in the production of a 2-alkyl-3-aminothiophene derivative by hydrogenating a 2-alkenyl-3-aminothiophene derivative using a noble metal catalyst, the reaction temperature is controlled at 150°C to 300°C. This method allows the used noble metal catalyst to be recovered and reused.

In the present invention, a sulfur-containing compound is reduced by hydrogenation at a reaction temperature of 150°C to 300°C using a noble metal catalyst to recover and reuse the noble metal catalyst. The method of the present invention is useful as an industrial reducing method by hydrogenation.